

Complete Summary

GUIDELINE TITLE

Cognitive disorders and HIV/AIDS: HIV-associated dementia and delirium.

BIBLIOGRAPHIC SOURCE(S)

New York State Department of Health. Cognitive disorders and HIV/AIDS: HIV-associated dementia and delirium. New York (NY): New York State Department of Health; 2005 Oct. 7 p. [6 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Cognitive disorders and HIV/AIDS. In: Mental health care for people with HIV infection: HIV clinical guidelines for the primary care practitioner. New York (NY): New York State Department of Health; 2001 Mar. p. 35-42.

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

- Human immunodeficiency virus (HIV) infection
- Cognitive disorders in HIV patients:
 - HIV-associated dementia (HAD)
 - Delirium associated with HIV

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Allergy and Immunology
Family Practice
Infectious Diseases
Internal Medicine
Neurology
Psychiatry

INTENDED USERS

Advanced Practice Nurses
Health Care Providers
Physician Assistants
Physicians
Public Health Departments

GUIDELINE OBJECTIVE(S)

To provide guidelines for diagnosis and treatment of cognitive disorders in human immunodeficiency virus (HIV)-infected patients in primary care settings

TARGET POPULATION

Human immunodeficiency virus (HIV)-infected persons

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Use of brief, standardized rating scale
2. Exclusion of other treatable, reversible causes of change in mental status
3. Complete evaluation including neuroimaging studies (computed tomography [CT], magnetic resonance imaging [MRI]) and lumbar puncture

Treatment/Management of HIV-associated Dementia (HAD)

1. Referral for psychiatric consultation, as appropriate
2. Antiretroviral drugs
3. Pharmacologic treatment of symptoms (psychotropic medications)
4. Non-pharmacologic treatment including
 - Family support, nursing case management, nursing home care services
 - Discussing advance directives and documenting the content of these discussions in the medical record

Treatment/Management of HIV-associated Delirium

1. Immediate referral of patients with signs and symptoms of delirium to the hospital
2. Correcting the underlying conditions that have led to delirium (low doses of antipsychotics with or without lorazepam)
3. Consultation with a psychiatrist

MAJOR OUTCOMES CONSIDERED

- Morbidity and mortality
- Cognitive status

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Human Immunodeficiency Virus (HIV) Guidelines Program works directly with committees composed of HIV Specialists to develop clinical practice guidelines. These specialists represent different disciplines associated with HIV care, including infectious diseases, family medicine, obstetrics and gynecology, among others. Generally, committees meet in person 3 to 4 times per year, and otherwise conduct business through monthly conference calls.

Committees meet to determine priorities of content, review literature, and weigh evidence for a given topic. These discussions are followed by careful deliberation to craft recommendations that can guide HIV primary care practitioners in the delivery of HIV care. Decision making occurs by consensus. When sufficient evidence is unavailable to support a specific recommendation that addresses an important component of HIV care, the group relies on their collective best practice experience to develop the final statement. The text is then drafted by one member, reviewed and modified by the committee, edited by medical writers, and then submitted for peer review.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

General Recommendation

Key Point:

Early stages of dementia and delirium are often subtle, difficult to recognize, and may resemble primary psychiatric disorders.

HIV-Associated Dementia

Presentation

Clinical Manifestations of HIV-associated Dementia	
Type of Impairment	Manifestations
Affective	<ul style="list-style-type: none">• Apathy (depression-like features)• Irritability• Mania, new-onset psychosis
Behavioral	<ul style="list-style-type: none">• Psychomotor retardation (e.g., slowed speech or response time)• Personality changes• Social withdrawal
Cognitive	<ul style="list-style-type: none">• Lack of visuospatial memory (e.g., misplacing things)• Lack of visuomotor coordination• Difficulty with complex sequencing (e.g., difficulty in performing previously learned complex tasks)• Impaired concentration and attention• Impaired verbal memory (e.g., word-finding ability)• Mental slowing
Motor	<ul style="list-style-type: none">• Unsteady gait, loss of balance• Leg weakness• Dropping things• Tremors, poor handwriting• Decline in fine motor skills

Diagnosis

Clinicians should exclude other treatable, reversible causes of change in mental status before a diagnosis of HIV-associated dementia (HAD) can be made (see Table 2 in the original guideline).

Clinicians should conduct neuroimaging studies and a lumbar puncture as part of a complete evaluation for HAD.

Key Point:

HAD may be incorrectly diagnosed as Alzheimer's disease. Early HAD differs from Alzheimer's disease in that it is more likely to present with behavioral changes, progresses more rapidly, may be associated with abnormal cerebrospinal fluid (CSF) findings, and is rarely associated with aphasia.

Management of Patients with HAD

Referral

Clinicians should refer patients with HAD who present with accompanying depression, mania, psychosis, behavioral disturbance, or substance use for psychiatric consultation to assist in psychopharmacologic treatment and management.

Clinicians should refer patients who require treatment with multiple psychotropic medications and/or are using illicit substances for psychiatric consultation because of the risk of drug-drug interactions and toxicity.

Treatment

Antiretroviral Drugs

Clinicians should assess the efficacy of the highly active antiretroviral therapy (HAART) regimen when patients receiving HAART present with symptoms of HAD.

Clinicians should initiate HAART when patients not receiving HAART present with symptoms of HAD.

Non-Pharmacologic Management

Clinicians should involve members of the patient's primary support system, such as family or friends, in both medication management and attending appointments and should educate them about HAD and its course.

Clinicians should assess patients' ability to function independently at home and arrange for assistance in the form of family support, nursing case management, and nursing home care services when indicated. Clinicians should refer patients who are unable to be safely cared for at home for placement in a skilled nursing facility.

Clinicians should discuss advance directives such as a living will, healthcare proxy, or durable power of attorney early in the course of illness, while patients have the capacity to make decisions about their treatment. Clinicians should clearly document the content of these discussions in the medical record and include copies of advance directives as part of the medical record.

Clinicians should consult with a psychiatrist if questions exist about a patient's mental capacity to make decisions about his or her treatment.

Refer to the original guideline document for a full discussion of the non-pharmacologic management of patients with HIV-associated dementia.

Delirium Associated with HIV

Clinicians should immediately refer patients who present with signs and symptoms of delirium to the hospital.

Presentation and Diagnosis

Clinicians should assess for delirium when there is a sudden change in a patient's cognitive functioning, consciousness, or behavior.

Clinical Manifestations of Delirium in Patients with HIV
Impairment of memory, orientation, prefrontal "executive" functions <ul style="list-style-type: none"> • Difficulty with abstraction • Difficulty with sequential thinking • Impaired temporal memory • Impaired judgment
Disturbances in thought and language <ul style="list-style-type: none"> • Decreased verbal fluency
Disturbances in perception <ul style="list-style-type: none"> • Hallucinations (primarily visual) • Illusions (misinterpretation of visual cues, e.g., mistaking shadows for people)
Disturbances in psychomotor function <ul style="list-style-type: none"> • Hypoactive • Hyperactive • Mixed hypo- and hyperactive
Disturbances in sleep-wake cycle <ul style="list-style-type: none"> • Daytime lethargy • Nighttime agitation
Delusions*
Affective lability
Neurologic abnormalities <ul style="list-style-type: none"> • Tremors • Ataxia • Myoclonus • Cranial nerve palsies • Asterixis • Cerebellar signs • Nystagmus

* Delusions are usually paranoid but more disorganized than those seen in psychoses.

Management of Patients with Delirium

Treatment should be aimed at correcting the underlying conditions that have led to delirium. Refer to the original guideline document for a discussion.

Key Point:

HIV-infected patients may be more sensitive to the side effects of psychotropic medications. Older patients and those with more advanced disease are at highest risk for side effects.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- The prompt diagnosis and treatment of cognitive impairment/dementia and delirium may significantly decrease morbidity and mortality.
- There have been marked improvements in the cognitive status of some people with HIV-associated dementia associated with the initiation of highly active antiretroviral therapy (HAART).

POTENTIAL HARMS

- HIV-infected patients are more likely than the non-infected population to develop extrapyramidal side effects with antipsychotic agents and hepatotoxicity with drugs that are metabolized primarily by the liver.
- Refer to Appendix I, Table I-1 in the original guideline for information on drug-drug interactions between HIV-related medication and psychotropic medication.

CONTRAINDICATIONS

CONTRAINDICATIONS

Refer to Appendix I, Table I-1 in the original guideline for lists of psychotropic medications contraindicated in patients on specific antiretroviral drugs.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Following the development and dissemination of guidelines, the next crucial steps are adoption and implementation. Once practitioners become familiar with the content of guidelines, they can then consider how to change the ways in which they take care of their patients. This may involve changing systems that are part of the office or clinic in which they practice. Changes may be implemented rapidly, especially when clear outcomes have been demonstrated to result from the new practice such as prescribing new medication regimens. In other cases, such as diagnostic screening, or oral health delivery, however, barriers emerge which prevent effective implementation. Strategies to promote implementation, such as through quality of care monitoring or dissemination of best practices, are listed and illustrated in the companion document to the original guideline (HIV clinical practice guidelines, New York State Department of Health; 2003), which portrays New York's HIV Guidelines Program. The general implementation strategy is outlined below.

- Statement of purpose and goal to encourage adoption and implementation of guidelines into clinical practice by target audience.
- Define target audience (providers, consumers, support service providers).
 - Are there groups within this audience that need to be identified and approached with different strategies (e.g., HIV Specialists, family practitioners, minority providers, professional groups, rural-based providers)?
- Define implementation methods.
 - What are the best methods to reach these specific groups (e.g., performance measurement consumer materials, media, conferences)?
- Determine appropriate implementation processes.
 - What steps need to be taken to make these activities happen?
 - What necessary processes are internal to the organization (e.g., coordination with colleagues, monitoring of activities)?
 - What necessary processes are external to the organization (e.g., meetings with external groups, conferences)?
 - Are there opinion leaders that can be identified from the target audience that can champion the topic and influence opinion?
- Monitor progress.
 - What is the flow of activities associated with the implementation process and which can be tracked to monitor the process?
- Evaluate.
 - Did the processes and strategies work? Were the guidelines implemented?
 - What could be improved in future endeavors?

IMPLEMENTATION TOOLS

Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

New York State Department of Health. Cognitive disorders and HIV/AIDS: HIV-associated dementia and delirium. New York (NY): New York State Department of Health; 2005 Oct. 7 p. [6 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2001 Mar (revised 2005 Oct)

GUIDELINE DEVELOPER(S)

New York State Department of Health - State/Local Government Agency [U.S.]

SOURCE(S) OF FUNDING

New York State Department of Health

GUIDELINE COMMITTEE

Mental Health Guidelines Committee

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

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This guideline updates a previous version: Cognitive disorders and HIV/AIDS. In: Mental health care for people with HIV infection: HIV clinical guidelines for the primary care practitioner. New York (NY): New York State Department of Health; 2001 Mar. p. 35-42.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [New York State Department of Health AIDS Institute Web site](#).

Print copies: Available from Office of the Medical Director, AIDS Institute, New York State Department of Health, 90 Church Street, 13th Floor, New York, NY 10007-2919; Telephone: (212) 268-6108

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- HIV clinical practice guidelines. New York (NY): New York State Department of Health; 2003. 36 p. Electronic copies: Available from the [New York State Department of Health AIDS Institute Web site](#).
- Appendix A: HIV dementia scale. New York (NY): New York State Department of Health; 1996 Nov. Electronic copies: Available from the [New York State Department of Health AIDS Institute Web site](#).
- Appendix B: modified HIV dementia scale. New York (NY): New York State Department of Health; 2002. Electronic copies: Available from the [New York State Department of Health AIDS Institute Web site](#).
- Appendix C: mental alternation test. New York (NY): New York State Department of Health; 1993. Electronic copies: Available from the [New York State Department of Health AIDS Institute Web site](#).
- Appendix D: The Memorial Sloan Kettering Scale for AIDS dementia complex. New York (NY): New York State Department of Health; 1998. Electronic copies: Available from the [New York State Department of Health AIDS Institute Web site](#).

Print copies: Available from Office of the Medical Director, AIDS Institute, New York State Department of Health, 90 Church Street, 13th Floor, New York, NY 10007-2919; Telephone: (212) 268-6108

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on May 4, 2005. It was updated by ECRI on October 19, 2005.

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